

What is claimed is:

1. A ply forming apparatus comprising:

    a feeder for unwinding a narrow ribbon-shaped ply cord from a roll of the ply cord as conveying the unwound ply cord; cutter for cutting said unwound ply cord into a strip of a length substantially conforming to a tire width;

    a bonding base on which said strips are sequentially bonded to each other along a predetermined direction and at a predetermined pitch;

    transfer device for transporting said strip from a cutting position to the bonding base;

    controller for driving-wise controlling said bonding base to permit said strips to be bonded to each other in a manner that the strips are overlapped with each other to form a predetermined amount of overlap along their longitudinal edges; and

    pressing device for pressing down on such overlap portion of said strips.

2. A ply forming apparatus as claimed in Claim 1, wherein said pressing device comprises a plurality of pressure rollers arranged along said overlap portion.

3. A ply forming apparatus as claimed in Claim 2, further comprising roller moving device for moving said plural pressure rollers along the longitudinal direction.

4. A ply forming process comprising the steps of:

unwinding a narrow ribbon-shaped ply cord from a roll of the ply cord as conveying the unwound ply cord;

cutting said unwound ply cord into a strip having a length substantially conforming to a tire width;

transporting said strip from a cutting position to a bonding base;

sequentially bonding said strips along a predetermined direction and at a predetermined pitch, said strips bonded to each other as overlapped with each other to form a predetermined amount of overlap along their longitudinal edges; and

pressing down on such overlap portion of said strips.